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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/690,501	10/23/2003	Takahiro Mabuchi	2927-0157P	6031

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EXAMINER

CHEUNG, WILLIAM K

ART UNIT PAPER NUMBER

1713

DATE MAILED: 11/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/690,501

Applicant(s)

MABUCHI ET AL.

Examiner

William K Cheung

Art Unit

1713

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 11-15 is/are rejected.
- 7) ☒ Claim(s) 9 and 10 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 1023.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
3. Claims 1-8, 13-15 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Hiroshi et al. (JP 8-334939).

*The invention of claims 1-8, 13-15 relates to **an elastomer composition** containing a **rubber or/and a thermoplastic elastomer** as a main component thereof and a **reinforcing filler** dispersed in said rubber or/and said thermoplastic elastomer, wherein a **T2 relaxation time (spin-spin relaxation) of a bound rubber formed in a portion which is disposed in close vicinity to said rubber or/and said thermoplastic elastomer and said reinforcing filler and includes an interface there between is set to not less than 250 μ s nor more than 400 μ s.***

Hiroshi et al. (Abstract; Page 8, Table) disclose EPDM rubber compositions comprising carbon black as a filler and an organic peroxide. Further, Hiroshi et al. (page 8, Table 2) clearly disclose that the disclosed compositions have JIS A hardness values of 27. Therefore, in view of the substantially identical composition and the substantially identical JIS A hardness values, the examiner has a reasonable basis to believe that the claimed "T2 relaxation time (spin-spin relaxation) of a bound rubber formed in a portion which is disposed in close vicinity to said rubber or/and said thermoplastic elastomer and said reinforcing filler and includes an interface there between is set to not less than 250 μ s nor more than 400 μ s", and that "the bound rubber is subjected to influence of a molecular motion generated by an interaction between the rubber or/and said

thermoplastic elastomer and said reinforcing filler in said portion that is disposed in close vicinity to said rubber or/and said thermoplastic elastomer and said reinforcing filler and includes said interface therebetween" are inherently possessed in Hiroshi et al. Since the PTO does not have proper means to conduct experiments, the burden of proof is now shifted to applicants to show otherwise. In re Best, 562 F.2d 1252, 195 USPQ 430 (CCPA 1977); In re Fitzgerald, 205 USPQ 594 (CCPA 1980).

Regarding claim 15 which claims using the claimed rubber roller as a roller for paper-feeding roller or a film-feeding roller, applicants must recognize that a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See In re Casey, 152 USPQ 235 (CCPA 1967) and In re Otto, 136 USPQ 458, 459 (CCPA 1963).

4. Claims 1-2, 5-8, 13-15 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Kazuhisa et al. (JP 2000-248133).

Hiroshi et al. (Abstract; col. 7-8, Table 5) disclose EPDM rubber compositions comprising carbon black as a filler and an organic peroxide. Therefore, in view of the substantially identical composition, the examiner has a reasonable basis to believe that the claimed "T2 relaxation time (spin-spin relaxation) of a bound rubber formed in a portion which is disposed in close vicinity to said rubber or/and said thermoplastic elastomer and said reinforcing filler and includes an interface there between is set to not less than 250 μ s nor more than 400 μ s", and that "the bound rubber is subjected to influence of a molecular motion generated by an interaction between the rubber or/and said thermoplastic elastomer and said reinforcing filler in said portion that is disposed in close vicinity to said rubber or/and said thermoplastic elastomer and said reinforcing filler and includes said interface therebetween" are inherently possessed in Hiroshi et al. Since the PTO does not have proper means to conduct experiments, the burden of proof is now shifted to applicants to show otherwise. In re Best, 562 F.2d 1252, 195 USPQ 430 (CCPA 1977); In re Fitzgerald, 205 USPQ 594 (CCPA 1980).

Regarding claim 15 which claims using the rubber roller as a roller for paper-feeding roller or a film-feeding roller, applicants must recognize that a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See

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In re Casey, 152 USPQ 235 (CCPA 1967) and In re Otto, 136 USPQ 458, 459 (CCPA 1963).

5. Claims 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kazuhisa et al. (JP 2000-248133).

Set forth from paragraph 4 of instant office action, the compositions of claims 11-12 are very similar to the compositions of Kazuhisa et al.

The difference between the invention of claims 11-12 and Kazuhisa et al. is that Kazuhisa et al. are silent that the reinforcing filler is not less than 150% nor more than 300%.

However, Kazuhisa et al. (col. 7-8, Table 5) clearly indicates that the amount of carbon black used in the disclosed EPDM composition is a result effective variable for hardness (JIS-A). Therefore, motivated by the expectation of success of further optimizing the hardness properties of the disclosed composition for use in rubber roller application, it would have been obvious to one of ordinary skill in art to use routine optimization techniques to optimize that amount of carbon black of the composition teachings in Kazuhisa to obtain the invention of claims 11-12.

Allowable Subject Matter

6. Claims 9-10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claims 9-10 are allowable because the closest prior art are silent on the claimed amount of carbon black in the claims, and that applicants' specification (page 21, Table 1) clearly indicates the criticality of the claimed amount of carbon black in claims 9-10 for reducing stain on paper during the supply of paper.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William K Cheung whose telephone number is (571) 272-1097. The examiner can normally be reached on Monday-Friday 9:00AM to 2:00PM; 4:00PM to 8:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David WU can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



William K. Cheung

Primary Examiner

October 29, 2004

WILLIAM K. CHEUNG
PRIMARY EXAMINER